CLAIMS

1. A method of forming a metal deposit on a substrate, the method including the steps of: providing a substrate with a first layer of a material whose activity as a catalyst for the deposition of metal from a solution of metal ions is adjustable by an irradiative technique; using said irradiative technique to pattern the first layer into active and non-active regions; and exposing the resulting pattern of active and non-active regions to a solution of metal ions whereby metal is selectively deposited therefrom onto the active regions of the first layer.

2. A method according to claim 1, wherein the material of the first layer is catalytically active before irradiation, and the irradiative technique is used to deactivate selected regions of the first layer.

3. A method according to claim 2, wherein the irradiative technique is used to selectively heat said selected regions of the first layer and thereby thermally deactivate said selected regions to create said pattern of active and non-active regions.

4. A method according to any preceding claim, wherein the said irradiative technique forms active regions of the said first layer isolated from other surrounding catalytically active regions.

5. A method according to claim 3, wherein a thermal imaging layer is provided below said first layer to assist the selective heating of said selected regions of the first layer.

6. A method according to claim 3, wherein a thermal imaging layer is provided over said first layer to assist the selective heating of said selected regions of the first layer; and including the further step of removing the thermal imaging layer after the step of patterning the first layer into non-active and active regions.

7. A method according to any preceding claim, wherein the radiation is of infrared wavelength.

8. A method according to any preceding claim, including the step of selectively depositing the first layer onto selected locations of the substrate corresponding coarsely to those locations where metal is to be deposited.

9. A method of forming a metal deposit on a substrate, the method including the steps of: depositing on selected locations of a substrate coarse zones of a first layer of a material whose activity as a catalyst for the deposition of metal from a solution of metal ions is adjustable by an irradiative technique; using said irradiative technique to pattern each coarse zone into active and non-active regions; and exposing the resulting pattern of active and non-active regions to a solution of metal ions whereby metal is selectively deposited therefrom onto the active regions of the coarse zones of the first layer.

10. A method according to claim 9, wherein said first layer zones are deposited by ink-jet printing.

11. A metallised substrate produced by a method according to any preceding claim.

12. An electronic device including a metallised substrate according to claim 11.

13. A method according to any of claims 1 to 10 of forming at least one metal element of an electronic device.

14. A method according to claim 13, wherein said electronic device forms a component of an electrical or electronic device.

15. A method of producing an electrical or electronic circuit, including the step of forming at least one metal element thereof by a method according to any of claims 1 to 10.

16. A logic circuit produced by a method according to claim 15.

17. A display or memory device including active matrix circuitry produced by a method according to claim 15.

18. An array of interconnections produced by a method according to claim 15.

19. A composition including a catalyst for the reduction of metal ions, and a chromophore.

20. A composition according to claim 19, wherein the chromophore is a chemical moiety that absorbs infrared radiation.

21. A composition according to claim 19, wherein the chromophore is carbon black.

22. A method according to any of claims 1 to 10, incorporating a composition according to claims 19-21.

23. A method according to any of claims 1 to 10 wherein the deposition of metal from the solution of metal ions is an electroless plating technique.

24. A method of forming a metal deposit on a substrate, the method including the steps of: providing a substrate with a first layer of a material whose activity as a catalyst for the deposition of metal from a solution of metal ions is adjustable by an irradiative technique; using said irradiative technique to pattern the first layer into active and non-

active regions; and using the resulting pattern of active and non-active regions to control the deposition of metal onto the substrate from a solution of metal ions.